

What is claimed is:

1. An inter-image operation method comprising the steps of

5 carrying out an inter-image operation between two or more sets of base image data each representing a distinct base image of an identical object to obtain processed image data therefrom, and

recording history data on past inter-image operations.

10 2. An inter-image operation method according to Claim 1, wherein the history data on the past inter-image operations are recorded in a designated recording medium.

15 3. An inter-image operation method according to Claim 1, wherein the history data on the past inter-image operations are attached to the processed image data obtained through the inter-image operation.

20 4. An inter-image operation method according to Claim 1, wherein the history data on the past inter-image operations are attached to each of said two or more sets of the base image data used for calculating the processed image data.

25 5. An inter-image operation method according to Claim 1, wherein the history data on the past inter-image operations include information identifying the base images each represented by one of said two or more sets of the base image data used for calculating the processed image data.

6. An inter-image operation method according to Claim 5, wherein the history data on the past inter-image operations are recorded in a designated recording medium.

7. An inter-image operation method according to Claim 5, wherein the history data on the past inter-image operations are attached to the processed image data obtained through the inter-image operation.

8. An inter-image operation method according to Claim 5, wherein the history data on the past inter-image operations are attached to each of said two or more sets of the base image data used for calculating the processed image data.

9. An inter-image operation method according to Claim 1, wherein the history data on the past inter-image operations include such data indicating whether or not the processed image data on a certain processed image have already been obtained.

10. An inter-image operation method according to Claim 9, wherein the history data on the past inter-image operations are recorded in a designated recording medium.

11. An inter-image operation method according to Claim 9, wherein the history data on the past inter-image operations are attached to the processed image data obtained through the inter-image operation.

12. An inter-image operation method according to Claim 9, wherein the history data on the past inter-image

operations are attached to each of said two or more sets of the base image data used for calculating the processed image data.

5        13.    An inter-image operation method according to Claim 9, wherein

the history data on the past inter-image operations include information on recording sites of the processed image data obtained in the past, and wherein

10        a desired set of the processed image data stored at the recording site thereof is fetched and outputted instead of conducting the inter-image operation to recalculate the desired set of the processed image data, if it was found by referring to the history data that the desired set of processed image data had already been obtained.

15        14.    An inter-image operation method according to Claim 13, wherein the history data on the past inter-image operations are recorded in a designated recording medium.

20        15.    An inter-image operation method according to Claim 13, wherein the history data on the past inter-image operations are attached to the processed image data obtained through the inter-image operation.

25        16.    An inter-image operation method according to Claim 13, wherein the history data on the past inter-image operations are attached to each of said two or more sets of the base image data used for calculating the processed image data.

17. An inter-image operation method according to Claim 5, wherein the history data on the past inter-image operations include such data indicating whether or not the processed image data on a certain processed image have already been obtained.

18. An inter-image operation method according to Claim 17, wherein the history data on the past inter-image operations are recorded in a designated recording medium.

19. An inter-image operation method according to Claim 17, wherein the history data on the past inter-image operations are attached to the processed image data obtained through the inter-image operation.

20. An inter-image operation method according to Claim 17, wherein the history data on the past inter-image operations are attached to each of said two or more sets of the base image data used for calculating the processed image data.

21. An inter-image operation method according to Claim 17, wherein

the history data on the past inter-image operations include information on recording sites of the processed image data obtained in the past, and wherein

a desired set of the processed image data stored at the recording site thereof is fetched and outputted instead of conducting the inter-image operation to recalculate the desired set of the processed image data, if it was found by

referring to the history data that the desired set of processed image data had already been obtained.

22. An inter-image operation method according to Claim 21, wherein the history data on the past inter-image operations are recorded in a designated recording medium.

23. An inter-image operation method according to Claim 21, wherein the history data on the past inter-image operations are attached to the processed image data obtained through the inter-image operation.

24. An inter-image operation method according to Claim 21, wherein the history data on the past inter-image operations are attached to each of said two or more sets of the base image data used for calculating the processed image data.

25. An inter-image operation method according to any one of Claims 1-24, wherein the inter-image operation includes a subtraction operation on a pixel-by-pixel basis between said two or more sets of the base image data.

26. An inter-image operation method according to any one of Claims 1-24, wherein each of said two or more sets of the base image data is a set of data representing an original image.

27. An inter-image operation method according to any one of Claims 1-24, wherein

the inter-image operation includes a subtraction operation on a pixel-by-pixel basis between said two or

more sets of the base image data, and wherein

each of said two or more sets of the base image data is a set of data representing an original image.

28. An inter-image operation method according to any one of Claims 1-24, wherein the base images each represented by one of said two or more sets of the base image data are taken at different points in time.

29. An inter-image operation method according to any one of Claims 1-24, wherein

the inter-image operation includes a subtraction operation on a pixel-by-pixel basis between said two or more sets of the base image data, and wherein

the base images each represented by one of said two or more sets of the base image data are taken at different points in time.

30. An inter-image operation method according to any one of Claims 1-24, wherein each of said two or more sets of the base image data represents a radiation image for medical use.

31. An inter-image operation method according to any one of Claims 1-24, wherein

the inter-image operation includes a subtraction operation on a pixel-by-pixel basis between said two or more sets of the base image data, and wherein

each of said two or more sets of the base image data represents a radiation image for medical use.

32. An inter-image operation apparatus comprising  
inter-image operation means which carries out an  
inter-image operation between two or more sets of base  
image data each representing a distinct base image of an  
5 identical object to obtain processed image data therefrom,  
and

history data recording means for recording history  
data on past inter-image operations.

33. An inter-image operation apparatus according to  
10 Claim 32, wherein the history data recording means records  
the history data on the past inter-image operations in a  
designated recording medium.

34. An inter-image operation apparatus according to  
15 Claim 32, wherein the history data recording means attaches  
the history data on the past inter-image operations to the  
processed image data obtained through the inter-image  
operation.

35. An inter-image operation apparatus according to  
20 Claim 32, wherein the history data recording means attaches  
the history data on the past inter-image operations to each  
of said two or more sets of the base image data used for  
calculating the processed image data.

36. An inter-image operation apparatus according to  
25 Claim 32, wherein the history data on the past inter-image  
operations include information identifying the base images  
each represented by one of said two or more sets of the

base image data used for calculating the processed image data.

37. An inter-image operation apparatus according to Claim 36, wherein the history data recording means records the history data on the past inter-image operations in a designated recording medium.

38. An inter-image operation apparatus according to Claim 36, wherein the history data recording means attaches the history data on the past inter-image operations to the processed image data obtained through the inter-image operation.

39. An inter-image operation apparatus according to Claim 36, wherein the history data recording means attaches the history data on the past inter-image operations to each of said two or more sets of the base image data used for calculating the processed image data.

40. An inter-image operation apparatus according to Claim 32, wherein the history data on the past inter-image operations include such data indicating whether or not the processed image data on a certain processed image have already been obtained.

41. An inter-image operation apparatus according to Claim 40, wherein the history data recording means records the history data on the past inter-image operations in a designated recording medium.

42. An inter-image operation apparatus according to



Claim 40, wherein the history data recording means attaches the history data on the past inter-image operations to the processed image data obtained through the inter-image operation.

5           43. An inter-image operation apparatus according to Claim 40, wherein the history data recording means attaches the history data on the past inter-image operations to each of said two or more sets of the base image data used for calculating the processed image data.

10           44. An inter-image operation apparatus according to Claim 40, wherein

the history data on the past inter-image operations include information on recording sites of the processed image data obtained in the past, and wherein

15           a desired set of the processed image data stored at the recording site thereof is fetched and outputted instead of conducting the inter-image operation to recalculate the desired set of the processed image data, if the inter-image operation means found by referring to the history data, that the desired set of processed image data had already  
20           been obtained.

25           45. An inter-image operation apparatus according to Claim 44, wherein the history data recording means records the history data on the past inter-image operations in a designated recording medium.

46. An inter-image operation apparatus according to

Claim 44, wherein the history data recording means attaches the history data on the past inter-image operations to the processed image data obtained through the inter-image operation.

5           47. An inter-image operation apparatus according to Claim 44, wherein the history data recording means attaches the history data on the past inter-image operations to each of said two or more sets of the base image data used for calculating the processed image data.

10           48. An inter-image operation apparatus according to Claim 36, wherein the history data on the past inter-image operations include such data indicating whether or not the processed image data on a certain processed image have already been obtained.

15           49. An inter-image operation apparatus according to Claim 48, wherein the history data recording means records the history data on the past inter-image operations in a designated recording medium.

20           50. An inter-image operation apparatus according to Claim 48, wherein the history data recording means attaches the history data on the past inter-image operations to the processed image data obtained through the inter-image operation.

25           51. An inter-image operation apparatus according to Claim 48, wherein the history data recording means attaches the history data on the past inter-image operations to each

of said two or more sets of the base image data used for calculating the processed image data.

52. An inter-image operation apparatus according to Claim 48, wherein

5 the history data on the past inter-image operations include information on recording sites of the processed image data obtained in the past, and wherein

10 a desired set of the processed image data stored at the recording site thereof is fetched and outputted instead of conducting the inter-image operation to recalculate the desired set of the processed image data, if the inter-image operation means found by referring to the history data that the desired set of processed image data had already been obtained.

15 53. An inter-image operation apparatus according to Claim 52, wherein the history data recording means records the history data on the past inter-image operations in a designated recording medium.

20 54. An inter-image operation apparatus according to Claim 52, wherein the history data recording means attaches the history data on the past inter-image operations to the processed image data obtained through the inter-image operation.

25 55. An inter-image operation apparatus according to Claim 52, wherein the history data recording means attaches the history data on the past inter-image operations to each

of said two or more sets of the base image data used for calculating the processed image data.

56. An inter-image operation apparatus according to any one of Claims 32-55, wherein the inter-image operation includes a subtraction operation on a pixel-by-pixel basis between said two or more sets of the base image data.

57. An inter-image operation apparatus according to any one of Claims 32-55, wherein each of said two or more sets of the base image data is a set of data representing an original image.

58. An inter-image operation apparatus according to any one of Claims 32-55, wherein

the inter-image operation includes a subtraction operation on a pixel-by-pixel basis between said two or more sets of the base image data, and wherein

each of said two or more sets of the base image data is a set of data representing an original image.

59. An inter-image operation apparatus according to any one of Claims 32-55, wherein the base images each represented by one of said two or more sets of the base image data are taken at different points in time.

60. An inter-image operation apparatus according to any one of Claims 32-55, wherein

the inter-image operation includes a subtraction operation on a pixel-by-pixel basis between said two or more sets of the base image data, and wherein

the base images each represented by one of said two or more sets of the base image data are taken at different points in time.

61. An inter-image operation apparatus according to  
5 any one of Claims 32-55, wherein each of said two or more sets of the base image data represents a radiation image for medical use.

62. An inter-image operation apparatus according to any one of Claims 32-55, wherein

10 the inter-image operation includes a subtraction operation on a pixel-by-pixel basis between said two or more sets of the base image data, and wherein

each of said two or more sets of the base image data represents a radiation image for medical use.

15 63. An image display method comprising the steps of displaying an image on a prescribed image display, said image being a processed image represented by processed image data obtained by carrying out an inter-image operation between two or more sets of base image data each  
20 representing a distinct base image of an identical object, and

displaying information identifying the two or more base images each represented by one of said two or more sets of the base image data together with the processed  
25 image.

64. An image display apparatus comprising

means for displaying an image on a prescribed image display, said image being a processed image represented by processed image data obtained by carrying out an inter-image operation between two or more sets of base image data each representing a distinct base image of an identical object, and

means for displaying information identifying the two or more base images each represented by one of said two or more sets of the base image data together with the processed image.